DOCUMENT RESUME

ED 294 271 CS 506 137

AUTHOR

Aitken, Joan E.

TITLE

Stephenson's Q Methodology: A Unique Tool for

Research and Instruction.

PUB DATE

Jun 88

NOTE

35p.; Paper presented at the Annual Meeting of the Canadian Communication Association (Windsor, Ontario, Canada, June 1988). Appendix containing descending

array of Z-scores may not reproduce clearly.

PUB TYPE

Speeches/Conference Papers (150) -- Information

Analyses (070) -- Reports - Evaluative/Feasibility

(142)

EDRS PRICE

MF01/PC02 Plus Postage.

DESCRIPTORS

Communication Research; Computer Software; Data

Analysis; Higher Education; Instructional

Effectiveness; *Personality Assessment; Personality Measures; *Q Methodology; *Research Methodology;

Teaching Methods

IDENTIFIERS

Intrapersonal Communication; Music Videos; Research

Curriculum; Research Trends; Stephenson Q

Methodology

ABSTRACT

Q methodology, a theory-based research technique begun by William Stephenson, permits a scientific approach to the study of subjective ideas, and proves useful in studying intrapersonal communication processes in a variety of contexts. The Q-sort, which incorporates Q methodology into a measure, allows respondents to sort statements (pictures or other materials) according to an agree--disagree (pleasure--unpleasure) continuum. Using this method, researchers can construct a theoretically based measure in which the respondents restructure information to reflect their interpretations. A study on music videos effectively illustrates the use of Q-sort statements as a research tool. Q methodology can also be used as an instructional tool, as demonstrated by a sophomore level interpersonal communication course structured around the design and completion of three Q-sorts. Course evaluations indicated that the use of Q methodology was an effective teaching strategy. (A list of resources is provided, including articles and manuscripts by Stephenson, a Q research journal, and computer programs analyzing Q data. Appendixes include: (1) music video Q-sort; (2) gender communication Q-sort; (3) gender Q-sort; and (4) student analysis of gender study results. Descending arrays of Z-scores and item descriptions for types 1, 2, and 3, and 37 references are appended.) (MM)

Reproductions supplied by EDRS are the best that can be made





Department of Communication Studies

5100 Rockhill Road Kansas City Missouri 64110-2499 Telephone (816) 276-1337

Stephenson's Q Methodology: A Unique Tool for Research and Instruction

Joan E. Aitken

University of Missouri--Kansas City

A paper presented at the annual meeting of the Canadian Communication Association, Windsor, Ontario, June, 1988.

Abstract: Q methodology is a research technique begun by William Stephenson. Over 1500 studies using the method have been completed, many of which reflect applications in the field of communication. As a research tool, Q methodology and Q technique permit a scientific approach to the study of subjective ideas and prove particularly useful in studying intrapersonal communication processes in a variety of contexts. As a teaching tool, Q can be used to structure student thinking on various issues and to teach students a method for solving problems.

The purpose of this paper is to provide basic information on Q methodology through the examples of a research study on music videos and instruction in an undergraduate interpersonal communication course.

Author Identification: Joan E. Aitken, (Ed.D. University of Arkansas), is an Assistant Professor, Department of Communication Studies, University of Missouri, Kansas City, Missouri, USA, 64110-2499, telephone (816) 276-1698. The author expresses her appreciation to Rodger Palmer, Anne Porche, and Keith Sanders for their research assistance. An earlier version of this paper was presented at the annual meeting of the Speech Communication Association, Boston, 1987.

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality

Points of view or opiniona state, in threil ocument do not necessarily represend official OERI position or policy.

an equality after a not

"PERMISSION TO REPRODUCE THIS MATERIAL 1:4S BEEN GRANTED BY

Joan : Aitken

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Stephenson's Q Methodology: A Unique Tool for Research and Instruction

The strength of Q methodology (Stephenson, 1953) has been shown through more than 1500 studies over the past fifty years (Brown, 1986, p. 72). Recent applications in communication (e. g. Cragan and Shields, 1981; Barchak, 1984; Stephen, 1985; Barbato, 1986; Murray, 1986; Nitcavic & Aitken, 1988) demonstrate the use of Q methodology in the communication discipline. The method has been proven effective in analyzing the "phenomenological world of the individual (or of small numbers of individuals) without sacrificing the power of statistical analysis" (Stephen, 1985, p. 193), and in analyzing the intrapersonal processes of large numbers of subjects (Cataldo et al, 1970). Q has been used to study human subjectivity, thus making it viable in the study of intrapersonal communication processes. Because of Stephenson's training in both the physical and behavioral sciences -- a Ph.D. in physics and a Ph.D. in psychology--he has developed a method that can serve as the science of subjectivity.

Introduction to Q Methodology

"In a nutshell," Q methodology is a set of procedures that can be used in developing theory-based research. Whether the researcher incorporates theory into a measure (Q-sort) or allows the data to suggest a theoretical explanation, the researcher obtains person-types or thinking patterns of people through principles of factor analysis.

The Q-sort is different from most paper-and-pencil measures, in that the respondent sorts statements (pictures or other material) according to an agree--disagree (pleasure--unpleasure) continuum. Instead of responding with one's agreement to each statement, the respondent sorts each statement to be placed on an agree-disagree continuum that shows the relationship between statements.

Q Applicability

Q has several important characteristics. (a) Q's heuristic ability provides fundamental research, (b) Q's theory-building ability can provide a framework for further study, (c) Q's analysis of the individual's intrapersonal communication processes gives a scientific approach to the study of subjectivity, (d) Q draws statements and structure from the culture, and (e) by using a structured Q-sort, the individual respondents' conceptual processes will transcend the researcher's theory. In communication research--which has been criticized by some for inadequate theoretical development--Q's greatest strength lies in its potential for shaping theory. Q methodology also has proven effective in



specific types of problem solving, such as in analysis of decision-making processes (Brown, 1980), and comparison of the real and ideal (Bem & Funder, 1978; Nitcavic, 1979).

One major advantage of Q method is that the researcher can construct a theoretically based measure, but the respondents will restructure that information so that it represents their interpretations. According to Stephenson (1980):

Q sorts are operations of "focalizing attention" under given conditions of instruction, in which measurement is for a person's feeling and belief with self-reference.... The individual, in Q sorting, may of course use judgment, reason, and comprehension, all of which we call conscious. But the underpinning is "affectability," and quantification is with respect to feeling, belief, and self reference. The outcome for any individual is operant factor structure, subject to various laws..., a structure that is indicative of objective properties of communicability of which the person is quite unaware. (p. 884)

The logic of Q is based on communication processes in that the Q statements represent language common to the people involved., After completing a Q sort by this author, a colleague commented that it was the most understandable survey he had ever seen from the standpoint of the language used in each statement. Perhaps the understandability was because the language of each statement came from the people interviewed, not the jargon of the researcher.

One might wonder why investigators simply cannot interview subjects regarding their feelings on an issue instead of using Q methodology. Research shows that people are unable to define their intrapersonal communication processes. As Brown (1986) explained, a person's "viewpoint [will] remain implicit (that is, present but undetected) unless provided with some instrumental medium, such as a Q sort, for transforming it into a manifestation" (Brown, 1986, p. 73). Regarding their understanding of cognitive processes, people may be unaware of their intrapersonal processes, and the existence and influence of stimuli (Nisbett & Wilson, 1977, p. 231). Thus, the Q method can enable the researcher to discover feelings and patterns he or she cannot discover in other ways.

Issues of Q Methodology

Among those who have analyzed the value of Q methodology, Kerlinger (1986) cautioned users regarding inappropriate applications. Although the method has proven its heuristic value and ability to uncover new relationships and conceptualizations, it remains controversial (personal conversation, Stephenson, January, 1987). To effectively use Q methodology, one must consider certain issues.



In the field of communication--which sometimes generates controversy over the values of empirical versus critical research -- some researchers (e.g. Murray, 1986) think Q offers the ability to provide theoretically grounded research with elements of subjective and objective analysis. Cragan (personal conversation, November, 1986) suggested that the use of Q may put the researcher in a middle area in which he or she finds difficulty being accepted by either colleagues doing quantitative research or colleagues doing qualitative research. The subjective nature of Q methodology makes the quantitative researcher suspicious and the "number crunching" of the factor analysis makes the qualitative researcher suspicious. Although he has published successfully in many prestigious sources, Stephenson has found difficulty in publishing Q studies and has encountered theorists and statisticians who have been unable or unwilling to understand Q methodology (personal conversation, January, 1987).

Q methodology links theory and statistics. In essence, the statistics provide the theory for the method. An understanding of the statistical basis is helpful to the researcher using Q methodology. One might ask whether Q method is simply the inverted R matrix. There is, obviously, a relationship between Q and R factor analysis. Q determines person factors while R determines concept factors. In one's data analysis, the researcher should make a decision regarding the Q-R use of horizontal matrices and whether or not the centroid method should be used in rotated solutions.

Several computer programs and program versions are now available for Q data analysis. Some researchers believe that the most recent are not necessarily the best, but there are advantages and disadvantages to each program. Certainly the differences between programs can somewhat shape the data analysis (VanTurbergen, 1975; Nesterenko & Wilson, 1980).

Some researchers use a template in the administration of a Q-sort. A template grid with pockets in which the respondent can place each Q statement is one method of effectively administering the Q-sort. This author used a grid on paper, which is another commonly used technique (see Appendix 2). Barchak provides a pamphlet of instruction for respondents doing Q-sorting, which includes photographs (personal conversation, February, 1988).

Sample size of people and sample size of statements have been an area of differences in opinions. Although some Q studies use large numbers of subjects, most rarely use more than approximately 50 subjects. Stephenson basically has argued for 40 to 60; Kerlinger has suggested 60 to 80. For validity, one does not need more than that in most cases, and in addition, with large numbers one is likely to find a severe regression to the mean (resulting in a one



factor solution) with large persons (amples. This author disagrees with Kerlinger (1986) on the issue of sample size and other issues about which Kerlinger appears less than up-to-date. Regarding sample size of people, there is adequate evidence that the method can be used successfully for a sample of one person up to thousands of persons. example, one application of Q would be to have a single individual cort statements under different conditions. One person might sort statements about communication apprehension, for example, first under the condition of speaking in a dyad, second under the condition of speaking in public, and so on. Because of certain computer program capacities, a factoring of factors may be useful with large numbers.

Long Q-sorts can be time consuming and confusing. 52 statement Q-sort in this study took college students between 10 and 45 minutes to complete. Although most people find the unique nature of Q-sorting fun to do, a long Q-sort can become tedious. The ability to discriminate levels of agreement accurately with large numbers of statements also raises certain questions. Investigators must determine the exact size--of people and statements--based on the pilot study and needs of the specific research (Stephenson, 1967, p. 17-20), and determine for themselves whether they consider the method appropriate for large surveys (Cataldo, Johnson, Kellstedt, & Mildrath, 1970).

Design and Construction of a Q-Sort

Three methods are commonly used in initiating statements for a Q-sort: the literature, interviews, and focus groups. In this case, relatively few statements were made regarding the industry promotion aspect of music videos, so additional statements were taken from the literature and added to this category. The key to using such statements is to word them in commonly used language rather than professional jargon. This author has found success in other studies using in-depth interviews of adults and focus groups of children to generate statements. Stephenson has developed Q-sorts that use color swatches and pictures. Anything one can sort according to a continuum appears appropriate.

When one considers the unique nature of Q-sorts, one can understand the administrative problems they present. Each Q-sort is copied on paper or cardboard stock, the cut up into a stack of statements (papers or cards). Those statements may be bound by a rubber band or placed in an envelope, for example. The actual process of cutting the statements and preparing each Q-sort is a time consuming one that may take several people hours. If the researcher uses small numbers or several small groups, considerable time can be saved in the preparation of the Q-sorts. Each stack of



statements should be shuffled between uses, however, so that the arrangement of one respondent does not influence the arrangement of the next respondent who uses that Q-sort stack. Administration to a large group instead of several small groups also raises the cost of making the Q-sort because so many more copies of the Q-sort are needed.

This author has found it easiest to put all Q-sort statements on a couple pages, make copies, then separate and cut out each page. This procedure works better than an assembly-line procedure because it goes faster and there is less apt to be a mistake in adding or omitting a statement.

Respondents have difficulty finding their own errors in a Q-sort because of the time required to go back and check each statements. The researcher or person entering the data needs to double-check for respondent mistakes. One problem this author experienced in using a computer printed Q-sort was that the appearance of number "36" and "38" were so similar that some respondents recorded "36" twice instead of both numbers. The researcher can generally correct such problems by looking at the content of statements to determine where the statements would most logically go. Another way of handling such problems is to put missing statements in the neutral-middle area. An occasional respondent mistake will not significantly alter the data.

Another respondent problem that occurs in research is the person who does not follow directions because he or she lacks the ability or desire to do so. The responses of such individuals probably will fail to load on factors with other respondents. A researcher should pay attention to loadings with only a few respondents because they represent a unique--although less common--person-type. The respondents who fail to load on any type probably represent persons who did not respond accurately on their Q-sort. In study using children (Nitcavic & Aitken, 1988), this author has found the technique ineffective with mentally retarded students. Apparently they cannot handle the complexity of the Q-sorting procedure.

Anyone using a Q-sort should consider the various discussions about the advantages and statistical soundness of using a structured Q. One concern in using a forced-choice grid is whether or not people who apply their responses to a grid structure (see Brown, 1971), will be "made the same" artificially. Instructing respondents to work from the two extremes toward the neutral-middle area, however, seems to solve that problem. Although people may differ in their intensity of feelings about the statements and their agree-disagree balance, this procedure should allow a viable method for each respondent.

To determine Q-sort validity, one can have a small number of respondents sort the statements according to the categories employed in the structure (theoretical and



positive-negative categories). One method of establishing reliability is to have some respondents re-sort the statements and then to compare the first and second sort. After an initial administration of a Q-sort, the researcher may chose to modify statements, particularly by omitting (or substituting) statements that generate the same response by all respondents. Some researchers use Q to develop measures and then convert them to a normative form using a Likert-type scale. Although Stephenson does not approve of this procedure (personal conversation, January, 1987), it may be appropriate depending upon the researcher's objectives.

To provide an example of a research application, this paper shows the procedures used to design a study using Q methodology for development of a theory about music video use. With their introduction to the public a few years ago, music videos have been an area of recent communication research. Content analysis of videos, for example, has revealed dominant themes and techniques (Baxter De Riemer, Landini, Leslie, & Singletary, 1985). Relatively little research exists on the effects of music videos, however, particularly in regard to the viewers' feelings. A survey of the literature showed three areas of current study and analysis about music videos: industry promotion, social benavior, and content. Consideration of interpersonal communication was added as an additional category of analysis. These areas formed the theoretical basis for the Q-sort.

To provide an example of an instructional application, this paper also shows the procedures used to teach an undergraduate course in interpersonal communication by the use of four Q sorts. Thus, the purpose of this paper is twofold: (a) to demonstrate how one can design and administer a theoretically-based measure (Q-sort) to solve research problems, and (b) to demonstrate how one can teach communication by using Q methodology.

Q As A Research Tool: A Music Video Study

Not all studies using Q techniques actually use Q methodology, in that Stephenson's Q methodology employs theoretically-based construction. Two key aspects in the development of a study using Q methodology are (a) to structure a measure that is theoretically based and (b) to use language common to the respondents. Thus, the content of the measure can be designed to include key elements that the researcher wants to test. In this case, a survey of the literature indicated three key aspects to music videos: industry promotion, social behavior, and content. The concept of interpersonal communication was added because this author wanted to see the relationship between music



video viewing and one's interpersonal interaction. To provide language that would be most capable of evoking meaning, the statements were gathered from essays about music videos. Using statements from the public allows the statements to have the same meaning, not in the sense that they are normative, but in the sense that the common language evokes meaning in any respondent. The purpose of the study was to determine whether the four categories related to music videos—industry promotion, social behavior, music video content, and interpersonal communication—provide a viable explanation for different types of music video viewers.

Method

The Q sort was generated from 98 college students in two communication classes. One class was shown five music videos, and given time in between each to write about their feelings. The other class was told to think about a music video they liked and one they disliked and write about them based on the following categories: visual abstraction-animation, sex, relationships, dance, violence, celebration, friendship, isolation, and character (Baxter, et al, 1985). The researcher originally considered the Baxter categories as a basis for theory development. Student responses, however, showed a much broader range of feelings. Because a researcher may choose to use Q to test the theories of others, the ideas of various researchers were built into this Q-sort.

This author considers structuring the most appropriate use of a Q-sort because it provides a way the researcher to build theory into the measure. Stephenson has, however, given mixed reactions to structuring (paper rebuttal, November, 1987). A structured Q sort was designed in this case to determine if the Q factors would support current literature on music videos. The Q-sort included 13 statements in each of four categories: (a) industry promotion, (b) social behavior, (c) music video content, and (d) interpersonal communication. If the theory is sound, the four factors should emerge after the data analysis. More likely, however, the data will transcend the theory by allowing a new form to emerge.

In the case of the Music Video Q-sort, this author categorized the statements according to their positive, mixed-or neutral, or negative tone either toward music videos or toward socially-accepted behaviors. The Q sort included 24 statements that were positive or neutral in nature and 28 statements that were negative in nature (see Appendix 1 for categorization of statements). Researchers should mix Q-sort statement numbering so as to avoid responder bias because of the categorization. This author prefers to include positive and negative statements,



although some researchers have found that the use of negative statements in disagree columns causes a double

negative that is confusing and disadvantageous.

To better understand the basis for the Q-sort structure in this case, a selected review of literature is included below. The current research seemed to fall into three main categories: industry promotion, social behavior, and content. A fourth category—interpersonal communication—was added to the Q sort to provide further explanation for viewer response to music videos.

Industry Promotion. A variety of researchers have discussed the role of industry promotion in music videos, some of whom consider promotion as the main purpose for their existence (Peterson-Lewis & Chennault, 1986; Sun & Lull, 1986; Dominick & Sherman, 1986; Hoberman, 1983; Zeichner, 1983). Music Television (MTV) began in 1981. Within three years, 25 percent of American households had 24 hour access to the music videos of the MTV channel, while virtually all households had access to some music videos on television (Brown & Campbell, 1986).

One major influence of music videos is that they decrease the need for performers to make expensive tours (Peterson-Lewis & Chennault, 1986). As Music Television (MTV) has grown in popularity, it has helped the music industry to increase record sales. MTV has become a new form of advertising, thus increasing video sales and record sales by influencing consumer purchasing of records, tapes, compact discs, and other products advertised on the channel (Sun & Lull, 1986). MTV was the first 24-hour all-music-video station. Viewers of Music Television buy more records than people without the music channel, and when buying records, viewers are more influenced by MTV than by radio, concerts, or commercial television (Hoberman, 1983). Music Television has been credited with driving the industry out of a buying slump by increasing sales (Zeichner, 1983).

Social Behavior. Perhaps the most important aspect of music videos is their relationship to social behavior because social behavior includes the social effects of music video viewing. According to Aufderfeide (1986), for example, "music videos have animated and set to music a tension basic to American youth culture: That feeling of instability which fuels the search to buy and belong" (p. 57). MTV has become a socializing agent which is almost mandatory to a happy ado?escent's life (Sun & Lull, 1986).

Major concerns are the portrayal of race, violence, and gender in videos. Brown and Campbell (1986) found: "Blacks were much more likely than whites to be shown in optimistic scenarios as helpful and caring individual, but almost exclusively in videos on a black channel; women and blacks remain minorities on MTV" (p. 94). According to Sherman and Dominick (1986), as far as visual content, "women, older



adults, and nonwhites are all more likely to be the aggressors than the victims" (p. 79). Caplan (1985) said about music videos: "Violence, victimization, gender portrayal and subservience are all played out in a bizarre, seemingly unrelated fashion" (p. 145). In their content analysis of music videos, Sherman and Dominick found "music videos are violent, male-oriented, and laden with sexual content" (p. 92). Lewis (1987) analyzed form and female authorship of music videos as aspects that "negotiate gender inequalities."

Music Video Content. A final area of music video research has been content. Because Music Television has creative potential aesthetic video and film effects nave become an important part of some videos (Caplan, 1985). The techniques behind images have energed as an art form of its As Baxter and other explained (1985), music videos have become "a contemporary hybrid of rock music and film imagery" (p. 333). They continued: "Producers rely heavily on special camera techniques, film imagery, and special effects in creating music videos" (p. 336). One might consider some music videos simply "bubble gum for the eyes," thus able to keep the attention of youth who have short attention spans. Providing a different analysis of the content, Wollen (1986) analyzed music videos according to cultural traits: "(1) the fine arts/avant-garde tradition, (2) the mass media, (3) vernacular culture (or sub-cultures), (4) the new technologies (mainly electronic) associated with the 'communications explosion' and the 'information revolution'" (p. 167).

Many music videos are characterized by their lack of fluidity. Gehr (1983) wrote: "If any one troupe sums up the rhetoric of rock video, it's that of discontinuity and disjunction" (p. 39). The videos have a dream-like quality that differs from reality (Kinder, 1984). Rubin, Rubin, Perse, Armstrong, McHugh, and Fair (1986) found that the same music have different meanings, depending upon whether they were in music-video or music-audio forms (p. 353).

Sin and Lull (1987) found that the purpose behind music videc viewing for many adolescents is "to find out what popular songs 'mean'" (p. 115). One problem may be that too many different kinds of music are presented back-to-back on television. As Peterson-Lewis and Chennault (1986) explained: "Artists may attempt to broaden their appeal to include audiences with which they traditionally have not been popular, blurring the distinctions between various types of music as a result" (p. 114).

Music Television has changed the relationship between records and radio (Gehr, 1983). After watching a video, the image tends to stays in one's mind so that the image returns when the song is heard later. The listener then remembers the music video's visual elements rather than focusing on



the lyrics to the song. Even when the visuals are abstract or unrelated to the song, they can still enter one's intrapersonal processes at least momentarily. As Kinder (1984) wrote: "One of the most compelling aspects of rock rideo is its power to evoke specific visual images in the mind of the spectator every time one hears the music with which they have been juxtaposed on television" (p. 3).

Interpersonal Communication. The influence of music videos on interpersonal interaction appears to be largely ignored in current music video research. Many of the respondents' statements, however, included aspects of interpersonal interaction that were caused by the viewing of music videos. Because of this author's desire to emphasize the communication relationship in music videos, the Q-sort included statements related to interpersonal communication. Thus, this fourth area was included to determine if certain person-types watch music videos primarily for interpersonal communication reasons.

Once completed, the Q-sort was administered to a group of over 127 college students enrolled in a large section basic communication course. Each computer program that can be used to analyze Q data has its own characteristics. In this case, QUANAL was used.

The maximum number of variables (people, in Q) that QUANAL can handle is 109, although one sometimes can analyze more if the number of statements is small (e.g. less than 40) or the number of points on the scale is small (e.g. a 7-point scale). Because of the number of subjects in the music video study, the computer could not process the full 127 variables at once. First, the sample was split into two parts (ore with 60 subjects and the other with 67) and run as two separate studies. Both worked. Of 127 subjects, 100 loaded on factor one, 12 loaded on factor two (10 negatively), four loaded on factor three (three negatively), and 11 subjects failed to correlate significantly. The three factor solution accounted for 57% of the total variance.

Because of the large group (N = 127) trial-and-error runs were made to see how many sorts could run at once. One run included 107 variables (people). On each run, the three solutions turned out to be virtually identical in factor structure. Had they not, then one could have proceeded to "factor the factors" in the split-halves approach. Instead, variable that was either confounded or non-significant were eliminated. There were about 11 such cases—an unusually small number out of a sample of 107. The high consistency in this case suggests that college students know how they feel about music videos.

To prepare a final run, the nonsignificant cases were replaced from the "left over" cases. All this had to be handled with care to make sure that subject ID numbers



matched the subject numbers on the computer printout. These procedures are quite defensible and, even, commonplace. For interest sake, the data was run in a split-halves approach. Again, the results were most consistent. The results in this case provide strong evidence for the validity of Q methodology.

The corasiation for factor loadings was set at .415 because it indicates a .01 level of significance.

Music Video Study Results

The best solution in this study seemed to be a three factor solution, with most people loading on the first factor. Considerations in determining solutions include the number of persons loading on factors, the communality between factors, reflected factors, and the percentage of negative factors. One can determine the nature of each factor from studying the statement array (agree-disagree) for each factor, which represents people's thinking pattern or structured response to the Q-sort. The correlation gives the degree to which individuals are like the person-types. Most researchers give each person-type a label that typified the factor--allowing easy conceptualization--and a brief description. Having used eight different communication-related Q sorts over the years, this author found that most people have loaded on the first factor, which reflects healthy communication behaviors. The same held true in this case. Below are the three types found in this study.

Type 1: The Video Viewer. Type 1 has a positive attitude toward music videos. They like music videos that show friendship and relationships, have plot and meaning, and bring back memories. They enjoy watching videos that have a message, and consider videos artistic and creative. Music videos make them want to sing. They recognize the importance of MTV to the music industry, and they generally enjoy videos. Content and industry characteristics were most important to these viewers.

Type 2: The Listener: Type 2 would rather listen to music than watch videos, and—in fact—they seldom watch videos. They have a more negative and cautious attitude toward videos, showing little enthusiasm for the medium. Interpersonal communication and social interaction were most important to this type.

Type 3: The People Viewer. Type 3 was similar to type one, although less interested in videos and more interested in people. They like videos that make a statement, and generally enjoy watching them. Music videos are important in leading trends in clothing, behavior, and culture. This person prefers people to media, and would rather listen to music than watch videos. Music videos make them feel very energetic. Content is most important to this type.

The sample here was young college students, a prime audience for music videos. If people of other ages had completed the Q sort, the factors may have been different, resulting in more inconsistency in the data. In this case, however, the characteristics of the music video audience—not a general population—was sought.

Theoretical Basis

To determine the value of the Q sort's theoretical basis, the factors then were analyzed regarding the ten most agree and ten most disagree statements, and the categories to which those statements related. By using a Chi-square test for independence, no significant difference was found between factors (Chi-square 6.81, contingency coefficient .32, Cramer's phi prime .24), thus indicating that respondents on all factors considered statements from all four categories important in describing their feelings about music videos. Thus, one may conclude that viewers recognize the influence of music videos on the music industry, they feel that music videos affect social behavior, they consider content important in their response to music videos, and their interpersonal communication is influenced by their music video viewing. The study supports these four categories -- industry promotion, social behavior, music video content, and interpersonal communication -- as basis for a viable explanation of viewer response to music videos.

Q As An Instructional Tool

Over the years, this author has used Q methodology in a variety of contexts. In the case of the music video study, data was collected from a large section basic course. The main reason for using so many subjects was because large numbers of students volunteered to complete the Q sort. One unexpected result, however, was that in the course evaluation, students frequently mentioned the Q sort on music videos in response to an evaluation about "the most interesting" and the "most thought provoking" part of the course. This author had taught graduate students about Q in research courses and collected data on students, but had never considered Q's potential value as a learning tool. Discussions at the Q conference suggested that Q methodology may be viable for providing the structure for a course.

Therefore, Q methodology was used as the basis for teaching an undergraduate course in interpersonal communication. The sophomore level course was structured around the design and completion of three Q sorts, one for each major unit of the course. The students were given a Q-sort from a previous study as an example for discussion of the objectives and basic techniques of Q methodology and used the lecture-discussion format for teaching about Q.

Objectives

The following educational objectives in using Q methodology were provided to the students:

- 1. To allow students to contribute to the advancement of knowledge, which includes testing theories found in the literature. [Students were encouraged to ask questions relevant to research findings on the particular issue being discussed.]
- 2. To encourage students to study areas of interpersonal communication in which they are interested. [The class as a group decided on the opecific area within the unit to be studied through each Q sort.]
- 3. To teach interviewing techniques. [After providing instruction on interviewing, the students interviewed people of their choice in order to collect statements for a Q concourse.]
- 4. To stimulate interpersonal discussion with another person(s) of importance to the student. [The interviews themselves and the process of collecting data caused the students to talk with friends and family members about interpersonal communication issues.]
- 5. To structure the student's thinking on specific interpersonal communication issues. [One of the strengths of doing a Q sort is the thinking process required. The individual must sort through ideas, compare them with his or her own ideas, determine degrees of agreement, and structure his or her thinking. Q sorting is a somewhat complicated, but an interesting and enlightening process.]
- 6. To compare each student (and their "significant other") to class ates in order to provide insight into their feelings and the feelings of those students around them. [Each student was required to turn in two completed Q sorts for each assignment, one done by a "significant other." The students coded their response sheets so their answers could be anonymous.]
- 7. To teach students a scientific method for investigating and solving problems. [Two students subsequently used adaptations of the technique.]

Instructional Technique

The class decided to do an additional fourth Q sort during the semester because they were interested in investigating another topic, so a Q-sort was developed on each of the following topics: (a) initial contact in meeting new people, (b) communication differences caused by gender, particularly relating to opposite-sex platonic friends, (c) negotiation and risk in interpersonal



relationships, and (d) termination or ending of relationships (see examples from gender study in appendices).

The quality of statements students obtained increased in sophistication as they progressed, reflecting greater depth of feelings. As Barchak encouraged, people can be poetic with the right kind of probing questions. The increased number and depth of responses indicated that the students improved their interviewing techniques during the semester. The entire process included the following steps for each of the four studies:

- The students selected a topic to be studied in depth, then read about the topic and discussed the topic in class.
- 2. Each student interviewed at least one significant other about the topic and obtained statements for the sort.
- 3. To save time, the teacher selected statements for the Q sort and typed up the statements and answer sheet.
- 4. Each student completed the Q sort and gave the Q sort to a significant other.
- 5. The teacher converted the data for computer analysis, determined the relevant factors, student loadings, and made copies of the results for the students.
- 6. Each student analyzed the factor statement arrays, then wrote a summary of each factor.
- 7. The teacher wrote a description of each factor based on the students' analyses and gave it to each student.
- 8. Student discussed the results with their significant others.
- 9. Each student evaluated the process and learning on his or her final examination.

Instructional Results. The task of compiling, printing, inputing data, and analyzing four Q sorts turned out to be enormous. If help had not hired, the projects would not have been completed on time. It is difficult to collect and analyze data under deadlines, especially when the students want immediate feedback. The same process using only one or two studies and allowing more than a week at the end of the semester for discussion of the projects would have been more realistic.

Instructional Results

During a mid-semester and final evaluation of the process, the students indicated that they considered the use of Q to be a valuable and interesting learning tool. With "10" representing the learning techniques used in the best class and "1" representing techniques of the poorest class



they have had in college, the mean student response rating of Q methodology was "7." Some example student comments included: "It produced a sense of accomplishment because the whole study--from start to finish--was our own doing....It is a chance to sort out one's thoughts....I really could relate to the factors that I fell into....It makes you really dig deep....I'll never forget these Q studies because they forced me to sit down and take some time to evaluate who I am and what I believe....Made me think about my values....I felt overwhelmed by all the information....The Q studies made me feel better about those around me as well as myself....Very interesting and fun...They really did make me think....I was involved in the process."

The students appeared to learn the basic principles of Q methodology in addition to interpersonal communication, and did so in an interested and involved manner. The use of Q methodology seemed more creative and applied than more traditional teaching methods. Personally, this author found the approach to be a way to experiment with Q methodology, learn more about the technique, and keep motivated.

Resources for Users of Q Methodology

Q methodology is unique, interesting, and extraordinarily successful for certain kinds of problems. In this paper, this author has tried to provide sufficient detail to enable a newcomer to tackle a problem by using Q methodology. Perhaps the best way to conclude is to provide some additional resources. This author has never met a kinder, more generous, more open-minded group of people than the researchers who use Q methodology. Perhaps using the technique makes the researcher more likely to question traditional forms of research, to respect the varied intrapersonal processes of people, and be more inclined to use new and creative approaches.

William Stephenson has several articles and eleven book-length manuscripts in progress, as he continues to work from his home: 2111 Rock Quarry Rd., Columbia, Missouri, U.S.A., 65201. Probably the two most important works on Q methodology are Stephenson's (1953) The Study of Behavior and Brown's (1980) Political Subjectivity: Applications of Q methodology in Political Science. Steve Brown is also quite approachable to people seeking help with Q methodology, and can be reached at: The Political Science Department, Kent State University, Kent, Ohio, U.S.A., 44242 (area code 216-672-2060). Brown edits Operant Subjectivity—an inexpensive journal that deals exclusively with Q research—which is worth reading. He also has compiled the most extensive bibliography on Q and heads the annual Q conference that meets each Fall in Columbia,

Q for Research and Instruction 17

Missouri, U.S.A. Len Barchak continues his work in communication at the Communication and Theatre Dept., McNeese State University, Lake Charles, Louisiana, U.S.A. 70609.

There are several computer programs available to analyze Q data: PCQ by Strickland; CENSORT for mainframes from the University of Iowa; Stephenson's ROSETTA; Hanley's PC program, Vantubergen's QUANAL for mainframes; Brown's JINNI for mainframes, and Barchak's statement program (personal conversation, S. Brown, November 17, 1987). For those who prefer to pay to have someone else run the data before investing in a program, they can find help from Donald J. Brenner, Director, The William Stephenson Research Center, School of Journalism, University of Missouri, Columbia, Missouri, U.S.A., 65205.

References

- Aufderheide, P. (1986, Winter). Music videos: The look of the sound. Journal of Communication, 36(1), 57-78.
- Barbato, C. A. (1986). Uses of interpersonal communication. Paper presented at Speech Communication Association, Chicago.
- Barchak, L. J. (1984, July). Discovering communication paradigms with Q Methodology: Ferment or sour grapes? Operant Subjectivity, 7, 115-130.
- Operant Subjectivity, 7, 115-130.

 Baxter, R. L., DeRiemer, C., Landini, A., Leslie, L., & Singletary, M. W. (1985, Summer). A content analysis of music videos. Journal of Broadcasting & Electronic Media, 29(3), 333-340.
- Bem, D. J., & Funder, D. C. (1978, November). Predicting more of the people more of the time: Assessing the personality of situations. Psychological Review, 85(6).
- Berg, C. (1984, November). Visual music the archaeology of music-video. Paper presented at the 70th annual Speech Communication Association Convention, Chicago.
- Brown, J. D., & Campbell, K. (1986). Race and gender in music videos: The same beat but a different drummer. Journal of Communication, 36(1), 94-106.
- Brown, S. R. (1971). The forced-free distinction in Q technique. The Journal of Educational Measurement, 8, 283-287.
- Brown, S. R. (1980). Political subjectivity: Applications of Q methodology in political science. New Haven, CT: Yale University Press.
- Brown, S. R. (1986). Q technique and method: Principles and procedures. In W. D. Berry & M. S. Lewis-Beck (Ed.)

 New tools for social scientists: Advances and applications in research methods. Beverly Hills: Sage Publications.
- Caplan, R. E. (1985, Spring). Violent program content in music video. Journalism Quarterly, 62(1), 144-147.
- Cataldo, E., Johnson, R., Kellstedt, L, & Mildrath, L. (1970). Card sorting as a technique for survey interviewing. Public Opinion Quarterly, 34, 202-215.
- Corliss, R. (1983). The medium is the maximum. Film Comment, 19(4), 34.
- Cragan, J. F., & Shields, D. C. (Eds.) (1981). Applied communication research. Prospect Heights, IL: Waveland
- Ehrenstein, D. (1983). Pre-MTV. <u>Film Comment</u>, 19(4), 41-42.
- Gehr, R. (1983). The MTV aesthetic. Film Comment, 19(4), 35-36.
- Kerlinger, F. N. (1986). Foundations of behavioral research. (3rd ed). New York: Holt, Rinehart and Winston.
- Kinder, M. (1984). Music video and the spectator: Television ideology and dream. Film Quarterly, 38(1), 2-15.

- Lewis, L. A. (1987), Form and female authorship in music video. Communication, 9, 355-377.
- Lull, J., & Sun, S. W. (1986). The adolescent audience for music videos and why they watch. Journal of Communication, 36(1), 115-124.
- Murray, E. (1986). Quantifying qualitative data: The Q-sort as an aid to interpretive rigor. Paper presented at Speech Communication Association in Chicago.

Nesterenko, A., & Wilson, S. A. (1980, October). CONCOURSE: Computer program for the Q methodologist. Operant Subjectivity, 4, 17-22.

Nisbett, R. E., & Wilson, T. D. (1977, May). Telling more than we can know: Verbal reports on mental processes Psychological Review, 84(3), 231-259.

- Nitcavic, R. G. (1979). A descriptive study of input and output variables in a multiple-approach basic speech course. Ph.D. Dissertation, University of Missouri-Columbia.
- Nitcavic, R. G., and Aitken, J. E. (1988). Inclusion expectancies of the adolescent handicapped as they interact with teachers and peers. Paper presented at the national meeting of the Central States Speech Association in Chicago.
- Peterson-Lewis, S., & Chennault, S. A. (1986). artists' music videos: Three success strategies. Journal of Communication, 36(1), 107-114.
- Rubin, R. B., Rubin, A. M., Perse, E. M., Armstrong, C., McHugh, M., & Faix, N. (1986, Summer). Media use and the meaning of music video, 63(2), 353-359.
- Sherman, B. L., & Dominick, J. R. (1986). Violence and sex in music videos: TV and rock 'n' roll. Journal of Communication, 36(1), 79-93.
 Stephen, T. D. (1985, Summer). Q methodology in
- communication science: An introduction. Communication Quarterly, 33, 193-208.
- Stephenson, W. (1953). The study of behavior. University of Chicago Press.
- Stephenson, W. (1967). The play theory of mass communication. Chicago: The University of Chicago Press.
- Stephenson, W. (1980). Newton's fifth rule and Q-Methodology: Application to educational psychology.
- American Psychologist, 35(10), 882-889. Stephenson, W. (1986). Interbehaviorism in a subjective framework: An objective psychology for subjectivity. Columbia, MO: The William Stephenson Research Center, University of Missouri.
- Sun, S. W., & Lull, J. (1986). The adolescent audience for music videos and why they watch. Journal of Communication, 36(1), 115-125.
- Van Tubergen, N. (1975). QUANAL user's guide (Computer program manual). Lexington, KY: Dept. of Communication, University of Kentucky.



Wollen, P. (1986). Ways of thinking about music video (and post-modernism). Critical Quarterly, 28, 167-170.

Zeichner, A. (1983). Video auteurs. Film Comment, 19(4), 42-44.

Appendix 1: Music Video Q-Sort

(4) Industry Promotion (Positive)

- 23. I enjoy watching music videos.
- 25. Music Television (MTV) has given musicians the broad public exposure necessary to make hit records.
- 31. Music Television (MTV) leads trends in clothing, behavior, and culture too.
- 39. I'd rather watch music videos on television than listen to music on the radio.

(3) Industry Promotion (Neutral/Mixed)

- 32. When I see a music video I really Like, I go out and buy a record, disc, or tape.
- 34. I'm in love with some of the music video performers.
- 41. I buy more records and tapes when I see a lot of music videos I enjoy.

(6) Industry Promotion (Negative)

- 30. The music video industry is fcr kids.
- 37. Music videos are just advertisements for the music industry.
- 38. I seldom watch music videos.
- 42. I prefer listening to my favorite music rather than a bunch of music videos on television.
- 43. Music videos end my need for attending concerts.
- 44. I pity the people caught up in this music video nonsense.

(2) Social Behavior and Response (Positive)

- 9. Music videos make me feel very energetic.
- 50. Music videos make me want to sing.
- (1) Social Behavior and Response (Mixed/neutral)



- 51. Music videos make me want to smoke and drink because they remind me of a bar.
- (10) Social Behavior and Response (Negative)
- 12. I don't think young children should be allowed to watch music videos.
- 13. Music videos make me feel sexually deprived.
- 14. Music videos make me feel like raising hell!
- 15. Music videos are selling sex: they are too suggestive.
- 17. Music videos often use women as sex objects.
- 18. For the most part, I am bored or disgusted with music videos.
- 20. I don't feel anything when I watch music videos. They make me numb.
- 21. Some music videos make me want to kill soft furry things.
- 49. Some music videos make me want to take a bathroom break during the video and come back for the commercials.
- 48. Some performers are sick. I wish they would die!

(3) Music Video Content (Positive)

- 19. I enjoy watching videos which make statements, have a message with the music and visual effects.
- 22. I like videos with plot and meaning.
- 27. Music videos are very artistic and creative.

(2) Music Video Content (Neutral/Mixed)

- 26. I like the ones that simply show the performers singing, without a lot of visual effects.
- 28. The quality of the music and lyrics are the most important part of a music video.

(8) Music Video Content (Negative)

3. Music videos turn me off because they give music a bad name.



- 6. I like the music videos involved in satanic activities.
- 10. I like the music videos with violence.
- 16. Music videos have no meaning.
- 29. After seeing the video, that's all I see when I hear the song.
- 35. I hate the music videos in black and white.
- 36. I like the music videos with leather, sadomasochism, and sex.
- 52. Half naked, beautiful girls are almost always a must in today's videos.

(6) Interpersonal Communication (Positive)

- Music videos really bring back memories about people I like to be with.
- 2. I like to watch music videos with other people. Actually, if I am not already with someone else, music video viewing often makes me call or visit a friend.
- 11. Music videos make me want togetherness.
- 45. I like music videos that show friendship and relationships.
- 46. Music videos make me want to dance with someone.
- 47. Music videos remind me of going with friends.
- (3) Interpersonal Communication (Mixed/neutral)
- 4. Music videos are great when you want to party.
- 24. Music videos kill time when I'm alone.
- 48. Music videos make me ache to be with the person I love.
- (4) Interpersonal Communication (Negative)
- 5. Music videos are a waste of time.
- 7. I'd rather be doing just about anything other than watching music videos.
- 8. I prefer people to media.



33. I like to watch music videos alone. In fact, they make me want to be alone.

Appendix 2: Gender Communication Q Sort

INSTRUCTIONS: You have been given a stack of 52 statements. These statements relate to communication patterns among men and women. Think about your communication with people with whom you have relationships. Please sort these statements according to your first impression, how you feel today.

Step 1. Begin by reading the statements and placing them in 3 piles: (1) those you agree with, (2) those you disagree with, and (3)

those you feel neutral or undecided about.

Step 2. Then take your "agree" pile and select from it the 2 statements with which you agree most strongly. Record the numbers on those statements in the 2 squares in the far-right ("+5") column of the figure below. From the remaining "agree" statements choose the 3 with which you agree next most strongly and record their numbers in the column with a "+4" over it. Repeat this procedure until there are

no remaining statements in your "agree" pile.

Step 3. Next, take your "disagree" pile and follow the same procedure, except begin with the far-left ("-5") column for your "most disagree" statements. Continue to work toward the middle until you have recorded the numbers of all your "disagree" statements. You probably will not have equal numbers of agree and disagree statements,

which is fine.

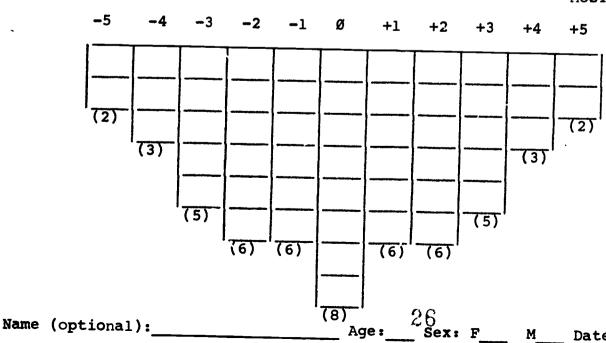
Step 4. Finally, take your "undecided" pile and arrange these statements in the middle. If you agree slightly with the statement, place its number toward the right and if you disagree slightly, place its number toward the left of the neutral area. Remember, it doesn't matter whether the agree-disagree balance is exact. Simply work from the extremes toward the middle, and your answers will be recorded correctly.

Be sure to put a number in every box. Use each number only once. (THIS IS VERY IMPORTANT). When you are finished, return this sheet and the stack of statements. Remember to complete the information items at the bottom of the page.

MOST DISAGREE

NEUTRAL AREA

MOST AGREE



Age: M Date: se double check to make sure you have recorded a number in every

ERIC and recorded each number only once. Thank you. Company of the second s

Appendix 3: Gender Q Sort Peveloped by Undergraduate Interpersonal Class

- 1. Some of my closest platonic friends are members of the opposite sex.
- 2. I can open up more to someone of the opposite sex.
- 3. A platonic relationship is in itself a rare form of love.
- 4. I share everything with my friends, except sex.
- 5. Women are not as loyal as men in their relationships.
- 6. Women friends are more competitive with each other than men are competitive with each other.
- 7. It makes me angry when other people think ' here is something romantic going on between us (opposite sex platonic friends).
- 8. Because I am involved in team sports, I find myself showing male mannerisms toward women.
- 9. You can have best friend relations between opposite sexes before you are married, but after that, husband and wife should be best friends.
- 10. Some mother and son relationships make it hard for the son to relate to other women.
- 11. Women are more open with their friends, while men are more secretive.
- 12. I would rather have a platonic relationship than any other kind.
- 13. I get jealous when my partner has friends of the opposite sex.
- 14. Men may show that they are angry by throwing something or yelling, but I cannot remember a male ever confiding that he is upset or depressed.
- 15. Male and female gender is not what makes communication different, it is the individual.
- 16. It is easier to have a deep conversation with a friend of the opposite sex than one of my own gender.



- 17. Touching and hugging is too intimate for a platonic relationship.
- 18. It is easier to "tell off" someone of the opposite sex than someone of my own gender.
- 19. Women get more emotional support from other women than men get from men.
- 20. Platonic relationships are generally longer lasting than those with romantic and sexual involvement.
- 21. In woman to woman relationships, if there are children, friendships get harder.
- 22. I have never come close to a member of the opposite sex without first being lovers.
- 23. I think my best friend will be there forever for me. The only thing that might end our relationship would be a spouse who could not accept our love.
- 24. My closet friend lives far away. I imagine talks to discuss problems in my life.
- 25. Males hold grudges longer than females.
- 26. Most of my friends are of the opposite sex.
- 27. When I tell a man confidential information, I can trust him more than I could if I told a weman.
- 28. I'd rather work or study with a female friend because they're more focused and serious than the guys--they know what needs to be done and they do it.
- 29. I avoid opposite sex plutonic relationships because of what "people may think."
- 30. If my intimate partner has time to do something with a plutonic friend, s/he should have the time to do something with me first.
- 31. I hate the way people spread rumors about a purely plutonic male-female relationship.
- 32. Women's best friends change as they go through life.
 Men keep the same friends throughout life.
- 33. Women are easier to talk to than men.



- 34. Men have more casual close relationships than women, who always need to know all the deep dark secrets.
- 35. I sometimes have sexual fantasies about a platonic friend.
- 36. I want my partner to be friends with my friends.
- 37. Having a friend of the opposite sex helps open my eyes to the basic feelings of the opposite sex.
- 38. At a party, it is easier to start talking to someone of the opposite sex than someone of my own sex.
- 39. I am intimidated more by someone of my same gender than one of my opposite gender.
- 40. A person of the opposite sex who is unattractive or unappealing to me is easier to become friends with. The expectations and inhibitions involved with romantic attraction are not present.
- 41. It is easier for me to manipulate people of the opposite sex.
- 42. Females are better listeners and helpers than males are.
- 43. My male friends are friends for life.
- 44. I would more often entrust a member of my own sex with an intimate secret about my past.
- 45. I maintain more active friendships than most people do.
- 46. Women talk to me about intimate things more than men do.
- 47. Platonic relationships are easier to maintain with someone I have known since childhood. I could never think of these kinds of friends in a sexual sense.
- 48. In developing a relationship between sexes, the males I know need more time to develop trust than the women I know.
- 49. Long term close friends don't have to worry about trust. That aspect of the relationship was worked out years ago.



Q for Research and Instruction 31

- 50. I find females to be more open-minded and jolly. Males scare me with some of their attitudes.
- 51. Usually the people who give a male and female (who are just friends) trouble about being "just friends" are jealous because they don't share such a unique relationship with anyone.
- 52. If I were to be unfaithful to my partner, it would probab. be because of one of my partner's best friends.

Appendix 4: Student Analysis of Gender Study Results

The data suggests a four factor solution (N=39). Significant factor loadings (.4125 level) were as follows: factor 1, 24 positive; factor 2, 1 positive, 2 negative; factor 3, 2 positive, 1 negative; nine not significant or confounded loadings. Each student turned in a paragraph description of each factor-type. The responses were compiled, omitting information that was very similar. teacher omitted analysis that portrayed any factor in very negative terms. Below is a compilation of student descriptions of factors (note that sexist language and analysis that conflicts between students is included). descending array of z-scores and item descriptions for the three types follow the student analysis.

Type 1

This person finds platonic relationships to be unique and fulfilling to the extent of what is put into the relationship is what is received out of it. Friendly, supportive and open-minded are a few of their qualities.

This person will be your friend through thick and thin. S/he has more women friends than men friends, and s/he feels that women are easier to talk to. Their platonic friendships with the opposite sex are exactly that and nothing more.

This type puts a lot of emphasis on their friends, and they are open with their relationships. They also have realistic and modern views about relationships.

Someone in touch with their feelings. S/he is only concerned with him/herself. Not afraid to have opposite sex friends.

Very open person.

The friendly social person. It seems to me that this type wants to be friends with everyone. They also want everyone to be friends with each other. This kind reminds me of the question-answer period in the Miss American Pageant-runway speech. They want to say something that pleases everyone.

Friendly with males and females, but not many close platonic friends of the opposite sex. Strong identity with women friends -- more trusting of females than males.

Trying not to be sexist. They want to be judged as an individual, not part of a group.

This person feels more secure and confident around people of his or her own sex. Though she isn't afraid of male companionship -- due to the obvious acceptance of plutonic relationships, she feels able to share more with a female friend.

This person realized that society treats males and females differently, especially in a personal realm. They



know that men and women have roles that are unique to each gender. This person also realizes by communicating with others of the opposite sex and looking for insight, they will be able to communicate with more insight and sensitivity.

[Some student responses directly contradict in this

This individual seeks approval from men. She confides in them, prefers men as her closest friend, and she finds men easier to talk with. Because of her confidence with the opposite sex, she views herself as being outgoing and able to handle deep conversations with the opposite sex. She has had poor experiences with women, finding that they hold grudges, and she feel more able to tell them off.

I think that this would be a young person. It would be the opposite of the first person. They are more towards that of a man's tendency.

They tend to be more positive towards a man and as it goes down, the evidence supports that they don't support women's actions.

He has a lot of friends and knows a lot of people. This person will have more of a tendency to want more out of a plutonic relationship.

This person thinks men are a little easier to talk to. They are active and interact well.

This personality is outgoing, extroverted, enjoys life and the presence of others.

This person, if a man, is one who has been raised with sisters or is married because he expresses favorable attitudes toward women.

Type 3

An observer, quite introverted.

This person appears insecure and needs others to reassure them. They seemed to notice people's actions and appearances, are watchful of others.

They tend to talk about friends in the long-term. Confident with a variety of people, she is more of a realist and accepts life. More mature.

Does not have close friends. They have had unsuccessful romantic encounters and would prefer to have platonic relationships.

Seems to have had many relationships, platonic or intimate that have fallen through. Seems untrusting of their partner's platonic relationships or female-female relationships. Believes that gender isn't as important as the individual.

Women are shallow in this type's view. They seem to be identifying with a traditional male attitude.



- DESCENDING ARRA	Y'OF-Z-SCORES-AND-ITEM-DESCRIPTIONS-FOR-TYPE		
in the same of the	D FEMALE GENDER IS NOT WHAT MAKES COMPUNICATION	2.08	
	NY PARTNER TO BE FRIENDS WITH MY FRIENDS. A FRIEND OF THE OPPOSITE SEX HELPS OPEN MY EYES	2.06	
) 3. A PLATO	THE BASIC FEELINGS OF THE OPPOSITE SEX. NIC RELATIONSHIP IS IN ITSELF A RARE FORM OF	1.62	<u>H</u> h
19. WOMEN G	VE MORE ENOTIONAL SUPPORT FROM OTHER WOMEN THAN	1.36 ,	i i i
AALA UCHEN T	ALK TO ME ABOUT INTIMATE THINGS MORE THAN MEN DO.	1.19	
AN AN	MÖRE GFTEN ENTRUST A MEMBER OF MY CHN SEX WITH Intimte secret about my past. Imes have sexual fantasies about a platonic	0.93	ear
, FR	IEND. SIER-TO "TELL-OFF"-SOMEONE-OF-THE-OPPCSITE-SEX AN SOMEONE OF MY OWN GENDER.	0.90	<u></u>
AZ. SEMALES	ARE BETTER LISTEMERS AND HELPERS THAN MALES ARE.	0.85	an
	THE PEOPLE WHO GIVE A MALE AND FEMALE (WHO ARE ST FRIENDS) TROUBLE AUGUT BEING "JUST FRIENDS" ARE JEALOUS CAUSE THEY DON'T SHARE SUCH A UNIQUE RELATIONSHIP WITH ANYONE.	1. 1	
30	METHING ROMANTIC GOING ON BETWEEN USE (OPPOSITE SEX	0.74	Ins
And the same of th	ATIONIC FRIENDS). E MORE CASUAL CLOSE RELATIONSHIPS THAN WOMEN, WHO WAYS NEED TO KNOW ALL THE DEEP DARK SECRETS.	0.69	- tru
41 IT IS E	ASIER FOR ME TO MANIPULATE PEOFLE OF THE OPPOSITE	0.66	ucti.
39 I.AM IN	TIMIDATED MORE BY SCHEONE OF MY SAME GENDER THAN E OF MY OPPOSITE GENDER.	0-61	g.
1 SOME OF	MY CLOSEST PLATONIC FRIENDS ARE MEMBERS OF THE	0.61	
30 SOME MO	TYER AND SON RELATIONSHIPS MAKE IT HARD FOR THE NOTICE TO STATE OF THE NOTICE TO STATE OF THE NOTICE THAT THE THAT THAT	0.55	
33. VOMEN A	DE FASTER TO TALK TO THAN MEN.	0.54	
37 THATE	THE WAY PEOPLE SPREAD RUMOKS ABOUT A PURELY UTONIC MALF-FFMALE RELATIONSHIP.	0.44	
TI WOMEN A	RE-MORE-OPEN-WITH-THEIR FRIENDS/ WHILE HEN ARE	0.41	
Transport of the special control of the speci	RM CLOSE FRIENDS DON'T HAVE TO HORRY ABOUT TRUST.	0.39	· · · · · · · · · · · · · · · · · · ·
SE NI	XËS BEFORE YOU ARE MARRIED, BUT AFTER THAT, HUSBAND AND		
38 AT A PA		0.33	a a a a a a a a a a a a a a a a a a a
) , market and a state PL	UTONIC-FRIENDE SHE SHOULD HAVE THE TIME TO DO SOMETHING		The same of the sa
- Z400 AT CEUS	SCUSS PROBLEMS IN MY LIFF.	0.06	*
) 50 I FIND-	FEMALES OF BE MORE OPEN-MINDED!AND!JOLLY_!! MALES " " ARE ME WITH.SOME!OF THEIR ATTITUDES,	0.03	**************************************
	ED MORE TIME TO DEVELOPY TRUSTS THAN THE WOMEN I KNOW!	·0.10 ·0.13	
SOI	MECNE I HAVE KNOWN SINCE CHILDHOOD. I CCULD NEVER THINK OF		
40 A PERSOI	ESC-KINDS-OF-FRIENDS IN A SEXUAL SENSE. N OF THE OPPOSITE SEX WHO IS UNATTRACTIVE OR UNAPPEALI ME IS EASIER TO BECOME FRIENDS WITH. THE EXFECTATIONS AND	-0.16	
Annothing a great straight of the straight of	The control of the second annual control of the con	•	
•		: .	
	HIBITIONS-INVOLVED-WITH-ROMANTIC-ATTRACTION-ARE NOT PRESENT.	0.28	- Hear - I'm - Williams Mandelle and a
SZ72-WENETE	POSITE SEX.	0.43	ang period and a second
43 HY MALE		0.51	
	EY'RE: HORE-FOCUED: AND SERIOUS THAN THE GUYS-THEY KNOW WHAT		* ", "
A Samuel To MA (NT)	AIN MORE ACTIVE FRIENDSHIPS THAN MOST PEOPLE DO	-U-33 · ~ · ~	
And the second s	DUSE, WHO COULD NOT ACCEPT OUR LOVE	.0.69	-, -,-
12 12 I - Would	CENDSHIPS GET HARDER		
2 T CAN OF	PEN-RIPHORE TO SOMEONE OF THE OPPOSITE SEX	0.75	La marina a salah da ba Tarah salah
F. WOMEN	KENDS AKE MUKE CUNFEITITE WILL ENGO VIDEN TONG	0.83	
BECAUSE:	V-ARE-COMPETITIVE WITH EACH OTHER. I AM INVOLVED IN TEAM SPOTS, I FIND MYSELF DWING MALE MANNERISMS TOWARD WOMEN.	0.92	
29.3I_AVOID	-OPPOSITE.SEX:PLUTONIC.RELATIONSHIPS BECAUSE-OF	-1.01	
	SHOW THAT THEY ARE ANGRY BY THROWING SOMETHING.	1.05	o
12.4.4	TS-UPSET OR DEPRESSED. THEY GO THROUGH-LIFE.	-1-03	and the property of the same
3 16.4 IT IS E	ASIER TO HAVE A DEEP CONVERSATION WITH A FRIEND THE OPPOSITE SEX THAN ONE OF MY OWN GENDER.	-1.05	•
254 MALES HO	-EVERYTHING-WITH-MY-FIRENDSEXCEPT SEX.	1.05 1.19:::-:::	
52 IF I WE	DBABLY BE BECAUSE OF ONE OF MY PARTNER'S BEST FRIENDS.	•1 •21 <u> </u>	·
ZZ I HAVE!	VEVER COME CLOSE TO A MEMBER OF THE OPPOSITE SEX	-2.03	
17 TOUCHING	AND HUGGING IS TOO INTINATE FOR A PLATONIC	-2.51	
Full Text Provided by ERIC	33		
SPECIAL BULLIN ABBREAR MARKET MARKET CONTRACT	The second secon		

•0	ESCENDING-AR	RAY-OF-Z-SCORES-AND-ITEH-DESCRIPTIONS-FOR-TYPE: 2		· · · · · · · · · · · · · · · · · · ·
)	36. I WAN	T MY PARTNER TO BE FRIENDS WITH MY FRIENDS.	1.80	and the second s
, –	Z: I CAN	OPPOSITE SEX. OPEN UP MORE TO SOMEONE OF THE OPPOSITE SEX. TONIC RELATIONSHIP IS IN ITSELF A RARE FORM 2F	1.65	,
- - 4 -	41 <u>1}</u> 1\$	LOVE. EASIER FOR ME TO MANIPULATE PEOPLE OF THE OPPOSITE	,1.52=== ;	
		TAIN MORE ACTIVE FRIENDSHIPS-THAN MOST PEOPLE DO	1:38	
	15 I 681	JEALOUS WHEN RY PARIMER MASEPRIENDS OF THE OPPOSITE SEX.	1.01	0 0
	38 AT A	PARTY, IT IS EASIER TO START TALKING TO SOMEONE CF	0.95 \ : 0.94	<u> </u>
3	49 LON6	OF MY FRIENDS ARE OF THE OPPOSITE SEX. TERM CLOSE FRIENDS DON'T HAVE TO WORRY ABOUT TRUST. THAT ASPECT OF THE RALTICUSHIP WAS WORKED OUT YEARS AGO.	. 68.0	· · · · · · · · · · · · · · · · · · ·
<u> </u>	-351.SOM	TTMES HAVE SEXUAL FANTASIES ABOUT A PLATONIC	0.80	. nd
		RE EVERYTHING WITH MY: FIRENDS, EXCEP, SEX. AND FEMALE GENDER IS NOT WHAT MAKES COMMUNICATION DIFFERENT, IT IS THE INDIVIDUAL OF MY SAME GENDER THAN INTIMIDATED MORE BY SOMEONE OF MY SAME GENDER THAN	0.68	
) <u> </u>	31 I HAT	INTIMIDATED MORE BY SOMEONE OF MY SAME GENDER THAN	0.54	
· —	7 17 44	PLUTONIC-MALE-FEMALE-RELATIONSHIP. KES HE ANGRY WHEN OTHER PEOPLE THINK THERE IS SOMETHING ROMANTIC GOING ON BETWEEN USE (OPPOSITE SEX	0.52	tic
, 		PLATIONIC FRIENDS)。 In-Mode-Often-Futdikst-1-Member-Og-My-Oun-Sex-With	0.47	9
)	27 WHEN	AN-INTINTE-SECRET-ABOUT-RY-PAST. I-TELL A MAN-CONFIDENTIAL INFORMATION I-CAN-TRUST	0.45	S. S
	-2122-020VF	TO THE PEOPLE AND BLYE ARGUT DETACK THIS ESTENDED ASE ISALOUS	0.43	<u> </u>
·		BECAUSE THEY DON'T SHARE SUCH A UNIQUE RELATIONSHIP WITH ANYOUS BEST FRIENDS CHANGE AS THEY GO THROUGH LIFE.		
	. 19 WONEN	GET MORE EMOTIONAL SUPPORT FROM OTHER WOMEN THAN THE MEN HEN GET FROM MEN A SUPPORT OF THE ME	0.3? - 0.35	
		TALK TO ME ABOUT INTIMATE THINGS MORE THAN MEN DO	0.35	
	20. PLATO	MIFE SHOULD BE BEST FRIENDS. MIC RELATIONSHIPS ARE GENERALLY LONGER LASTING THAN	0.31	
	in 16 IT IS	-EASIER TO HAVE A DEEP CONVERSATION WITH A FRIEND	0.20	
	57. TE T	DISCUSS PROBLEMS IN MY LIFE.	0.02	
) 	4 4 3 HV	PROBABLY BE BECAUSE OF ONE OF MY PARTNER'S BEST FRIENDS.	-0.03	
	S - WOMEN	PIRENDS ARE HORE COMPETITIVE WITH EACH OTHER OF THE FARMEN ARE COMPETITIVE WITH EACH OTHER	-0.41	
	40 A PER	SON OF THE OPPOSITE SEXWHOSIS UNATTRACTIVE OR UNAPPEALI		- x +
	23 I.THI	NK MY BEST FRIEND, WILL BE THERE FOREVER FOR ME.	-0.46	1-11
· · · · · ·	Tanakan ing menganan salah salah Tanah salah sa	reference of the control of the cont	en e	and the second s
		THE CALL TO THE CONTROL OF THE CONTR	10 10 10 10 10 10 10 10 10 10 10 10 10 1	and Special Street or State of
)	TA THE MEN U	NUSE BRUIL OUL HOLIANTER EN OUR LOVE SALANTER AND LONG THE MAN LONG LAND AND LAND AND LAND AND LONG LAND AND LAND L		
للمر .	· () · · · B() F(2)		-0.52	
· · · · · · · · · · · · · · · · · · ·	- 8 BEÇAU	ORE SECRETIVE SECRETIVE SECTION OF SECTION OF SECRETIVE SECTION OF	-0.56	
	- 47 PI ATO	IC RELATIONSHIPS ARE EASIER TO MAINTAIN WITH TOREGNET I HAVE KNOWN SINCE CHILDHOOD IN I COULD NEVER THINK OF	7.77 TU-04	are do not are a servery and a
		irniomic: baifudy: 2/45: 240nrox4445#ius: itus:io- no# 20us iusud	0.64	
	42. FEMAL	ITH ME FIRST. S ARE BETTER LISTENERS AND HELPERS THAN MALES ARE. 10THER AND SON RELATIONSHIPS MAKELIL HARD FOR THE	-0.69	
	Z1 = INTHO	IAN TO UCHAN RELATIONSHIPS I FLITHERE ARE CHILDREN	-0.73	
		RIERDSHIF Sac GE LO HAK DE Kanasa may consistent and a management and a management of the control of the contro		** ** ** ** ** ** ** ** ** ** ** ** **
)	-18	EED MORE TIME TO DEVELOP TRUSTSTHAM THE WOMEN I KNOW		
	- 20 - and Larrin	ICARE ME VITH SOME OF THEIR ATTITUDES AND BOLLT		72 "30/7/2#th/15
		THEY RE-MORE FOCUED AND SERIOUS THAN THE GUYS THEY KNOW WHAT		The second second second
	The an HENNA	AY SHOW THAT THEY ARE ANGRY BY THROWING SOMETHING THAT INC. INC. SOMETHING THAT INC. SOMETHING THAT THEY BY THEY BY THEY SHOW THAT THAT THEY BY THAT THAT THEY BY THAT THEY BY		
	=25MALES	-HOLD-DRUDGES-LONGER-THAN-FEMALES.	1.38	AL TOTAL PARTY OF THE PARTY OF
e i evest	~ 12. p I- WOU	DERATHER NAVERAN PLATONIC: RELATIONSHIP THAN ANY A		THE STATE OF THE S
RIC	29 I AVO	TO OPPOSITE SEX PLUTONIC RELATIONSHIPS BECAUSE OF HAT THINK." HEYER COME CLOSE TO A MEMBER OF THE OPPOSITE SEX	-1.94 -2.01	_
Text Provided by ERIC	ZZ I HAV	TRYER COME CLOSE TO A MENSER OF THE OPPOSITE SEX 12 HOUT PIRST BEING LOVERS		

j			• • • •
٠ ـ	DESCENDING ARRAY OF 2-SCORES AND ITEM DESCRIPTIONS FOR TYPE 3		
7	15 MALE AND FEMALE GENDER IS NOT WHAT MAKES COMMUNICATION		
	36. I-WANT MY PARTNER-TO BE FRIENDS WITH MY FRIENDS. 49. LONG TERM CLOSE FRIENDS DON'T HAVE TO WORRY ABOUT TRUST. THAT ASPECT OF THE RALTICUSHIP WAS WORKED OUT YEARS AGO.	2.02 1.54	
7	SAL REN MAVE RUKE CASUAL CLUSE KELAITUNSHIPS INAN WUNENY WAV	1.49	
_	ALWAYS NEED TO KNOW ALL THE DEEP DARK SECKETS.	1:45"	
•	SOMEONE I HAVE KNOWN SINCE CHILDHOOD. I.COULD.REVERITHINK OF		
		-1-27	: œ
3) 13 I GET JEARÓUS WHEN MY PÄRTNER HÁS FRIENDS OF THE Opposite sex.	1.18	e e
	30 IF-MY NTIMATE PARTNER HAS TIME TO DO SOMETHING WITH A PLUTONIC FRIEND, S/HE SHOULD HAVE THE TIME TO DO SOMETHING	-1-1 ,7-	<u> </u>
3	31 I HATE THE WAY PEOPLE SPREAD RUMORS ABOUT A PURELY	1.16	
	PLUTONIC-MALE-FEMALE-RELATIONSHIP.	1.01	
9	32 WOMEN'S BEST FRIENDS CHANGE AS THEY GO THROUGH LIFE. MEN KEEP THE SAME FRIENDS THROUGHOUT LIFE. 44 I WOULD HORE OFTEN ENTRUST A MEMBER OF MY OWN SEX WITH	0.98	: !
	AN-THIT PRESERVE TARGET AND THE PASTA	·· 0.80 ··	<u></u>
3	46. NOMEN TALK TO ME ABOUT INTIMATE THINGS MORE THAN MEN DO.	0.76	struction
		-0.68-	` _
3	THOSE WITH ROMANTIC AND SEXUAL INVOLVEMENT. 45 I MAINTAIN MORE ACTIVE FRIENDSHIPS THAN MOST PEOPLE DC.	0.50	i. O
-	7 IT MAKES HE ANGRY WHEN OTHER PEOPLE THINK THERE IS	0.48	<u> </u>
•	SOMETHING ROMANTIC GOING ON BETWEEN USE COPPOSITE SEX-	0:41	Ψ
	HIM-MORE THAN I COULD IF I TOLD A WOMAN. 17 TOUCHING AND HUGGING IS TOO INTIMATE FOR A PLATONIC	-0.40	ang an an orante di nin n Open y
•	RELATIONSHIP. A8. TH DEVELOPING A RELATIONSHIP BETWEEN SEXES MALES I KNOW	0.38	
	NEED MORE TIME TO DEVELOP TRUST THAN THE WOMEN I KNOW.	0.38-	
_	NOTE OF THE STATE	.0.29	<u> </u>
	6. WOMEN FIRENDS ARE MORE COMPETITIVE WITH EACH OTHER THAN	0.28	
_	24TW WOMAN.TO WOMAN RELATIONSHIPS, IF IMERE ARE CHILDREN.	:0.17	
•	11 WOMEN ARE MORE OPEN WITH THEIR FRIENDS, WHILE MEN ARE	. 0.17	
_	39. I AM INTIMIDATED MORE BY SOMEONE OF MY SAME GENDER THAN	0.12	·
J	51 USUALLY THE PEOPLE WHO GIVE A MALE AND FEMALE (WHO ARE LEALOUS	0.11	
_	RECAUSE THEY DON'T SHARE SUCH A UNIQUE RELATIONSHIP WITH ANYUNE	0.04	
•	28. I'D RATHER WORK OR STUDY WITH A FEMALE FRIEND BECAUSE They re more focued and serious than the Guys—They know what	0.04.	
_	9 YOU CAN HAVE BEST FRIEND RELATIONS BETWEEN OPPOSITE	-0.05	
3	SEXES BEFORE YOU ARE MARRIED, BUT AFTER THAT, HUSBAND AND		
_	SOME OF MY CLOSEST PLATONIC FRIENDS ARE MEMBERS OF THE	-0.10 -0.20	
3	OPPOSITE SEX.		
_	The same of the sa		
3	gang ang kalan Tabbahanga da manangambahahan arawa ang pangalan na pangan garawan na manangan na manangan na m		
	42 FEMALES-ARE BETTER LISTENERS AND HELPERS THAN MALES ARE. 2. 1 CAN OPEN UP MORE TO SOMEONE OF THE OPPOSITE SEX.	-0.28	And the second s
3	18TITIS EASIER TO TELL OFF SOMEONE OF THE OPPOSITE SEX		The second secon
	38 AT A PARTY IT IS EASIER TO START TALKING TO SOMEONE OF	-0.41	
)	43. NY MALE FRIENDS ARE FRIENDS FOR LIFE. 10. SOME MOTHER AND SOME RELATIONSHIPS MAKE IT HARD FOR THE	-0.43	
	SON TOURELATE TO UITER WOREN.	-0.51	
)	50 I-FIND-FEMALES-OT-BE MORE-OPEN-MIND D-AND-JOLLY MALES-	0.53	
	8. BECAUSE TAM INVOLVED INTEAN SPOTS TOTAL HYSELF	-0-69	,:
3) 16IT IS EASIER TO HAVE A DEEP CONVERSATION WITH A FRIERD	-0.70	ا بين در - معم
-	·	-0.94	ATT AND
)	OR YELLING BUT I CANNOT RENEMBERTA MALE EVER CONFIDING THAT	-1.07	a su u en
	29: I AVOID OPPOSITE SEX PROTONIC RELATIONSHIPS BECAUSE OF THE NAME OF THE NAM	-1:09	
3	DISCUSS PROBLEMS IN RY LIFE -	-1-10	william to the comment of the comment
	25 NALES HOLD DRUDGES LONGER THAN FEMALES.	-1.14	on a manufacture
3	4. LISHARE EVERYTHING WITH HYTFIRENDS EXCEPT SEX.	-1.17	
3	12. I WOULD RATHER HAVE A PLATONIC RELATIONSHIP THAN ANY	-1.22	•
	OTHER KIND.	-1.52-	
j	TO ME IS EASIER TO BECOME FRIENDS WITH A THE EXPECTATIONS AND AND THE THIRD AND THE THEORY AND THE	_4 60	
_	135.6. I.SONETIMES HAVE SEXUAL, FANTASIES ABOUT A PLATONIC :	-1.89	· • • • • • • • • • • • • • • • • • • •
	52 IF I WERE TO BE UNFAITHFUL TO MY PARTNER, IT WOULD PROBABLY BE BECAUSE OF ONE OF MY PARTNER'S BEST FRIENDS.	-2:00	,
E	RICHAVE NEVER COME CLOSE TO A REMBER OF THE OPPOSITE SEX	-2.02	
.			eller de W